

Assigning I/O Information within elecworks™

In this month's *Tips and Tricks* we are going to look at how information can be taken from a manufacturers PLC program and reused within **elecworks™**.

With **elecworks™** 2011, you can enter the I/O description label text in two methods.

1. Manually double click on each *Description (English)* cell to enter the values.

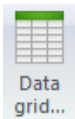
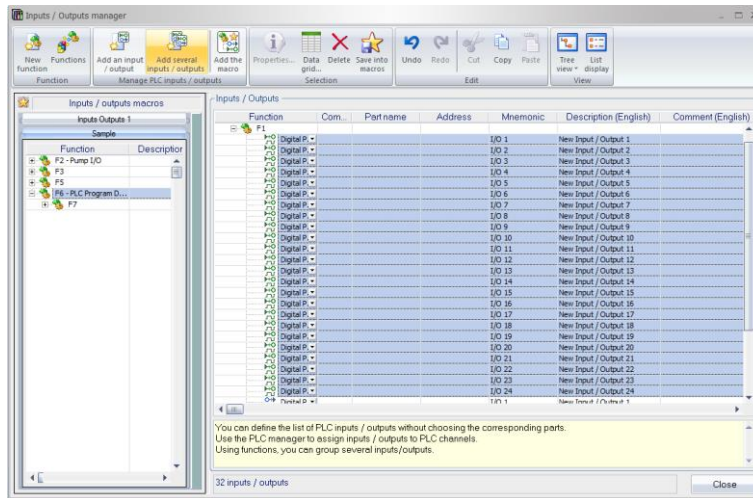
N.B. With this method you cannot guarantee the descriptions defined in **elecworks™** match the descriptions defined in the PLC program.

2. Assign multiple inputs and outputs at the same time by importing data from the PLC programme or PLC XLS I/O estimate.

In this example we will look at method 2.

Highlight all of the digital inputs that you have added to the current **elecworks™** project as shown.





Select **Data grid...** *Data Grid*

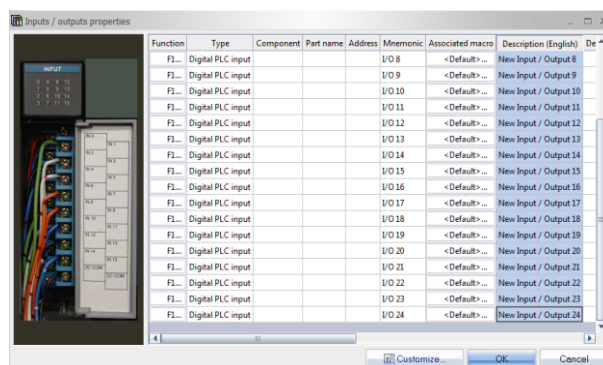
Open the excel data spreadsheet from the manufacture of the PLC program or a CSV, ASCII, XLS file. Use Excel to open the CSV, ASCII file rather than Wordpad or Notepad.

Highlight the inputs from the PLC program and *right-click* and *Copy* (example shown below)



	A	B
1	Allen Bradley PLC PROGRAM EXPORT: Example for plc automation	
2	ADDRESS	DESCRIPTION
3	I 0.0	Desk E.Stop Pressed
4	I 0.1	Machine Hardware Run Request
5	I 0.2	Machine Crawl Relay
6	I 0.3	Main E-Stop Healthy
7	I 0.4	Machine Start Button
8	I 0.5	Machine Stop Button Pressed
9	I 0.6	E.Stop Reset Button Pressed (Fault Reset)
10	I 0.7	Spare
11	I 1.0	Scan Motor Max
12	I 1.1	Scan Motor Max NDS
13	I 1.2	Guider Alarm - Missing Line
14	I 1.3	E.Stop Feed Confirm
15	I 1.4	Unwind Arms Raised
16	I 1.5	Shafted Unwind Cap Lock
17	I 1.6	Shafted Unwind Cap Lock NDS
18	I 1.7	Driven Unwind Dancer Limit
19	I 2.0	Emergency Stop Pushbutton P11
20	I 2.1	Emergency Stop Pushbutton P12
21	I 2.2	Unwind Motor Blower Overload Healthy
22	I 2.3	Emergency Stop Pushbutton P9
23	I 2.4	Emergency Stop Pushbutton P10
24	I 2.5	Unwind Peel off roller raised
25	I 2.6	Emergency Stop on P14
26	I 2.7	Spare
27		
28	Q 0.0	Machine Hardware Stop
29	Q 0.1	Plc Emergency Stop Control
30	Q 0.2	plc generated ZSR to break Stop circuit latch
31	Q 0.3	Scan Motor Forward
32	Q 0.4	Scan Motor Reverse
33	Q 0.5	Upper splice clamp
34	Q 0.6	Lower Splice Clamp
35	Q 0.7	Unwind Brake Solenoid

Highlight the Descriptions (English) in **elecworks™** using *Shift* and *Ctrl* and *right-click* and *Paste*



Select 


In the Data Grid, the user is able to assign a different circuit macro to each individual I/O point. Alternatively you can leave as default and swap out symbols at a later stage once drawn.

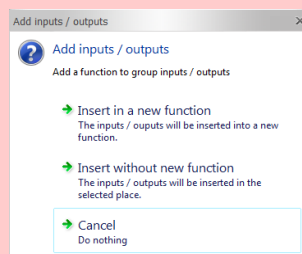
The process for assigning all of the digital inputs and outputs can be saved as a circuit macro

If you wish to save the I/O information for use on other projects you have the ability to *Save into Macros*

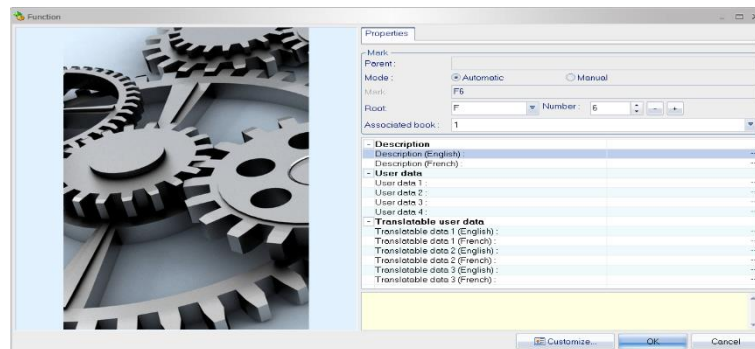
Highlight the function as shown from the Inputs / Outputs

Function	Com...	Part name	Address	Mnemonic	Description (English)	Comment (English)
TRAINING PROJECT						
F1	Digital P... N1	1746-148	I/O 1.0	I/O 1	DESK ESTOP PRESSED	

Select  *Save into macros*



Select → Insert in a new function



Define the following

Description (English) PLC Program Data

Select 

The new function will appear in the Inputs/Outputs macros list

Select 

The new project function contains all of the I/O Descriptions and are now available for use within **elecworks™** whether you draw your circuits automatically or manually.

